DOCUMENT RESUME

ED 282 448 FL 016 747

AUTHOR Hamers, Josiane F.
TITLE The Relevance of Social Network Analysis in the Psycholinguistic Investigation of Multilingual Behavior.
PUB DATE 87
NOTE 13p.; In: Blanc, Michel, Ed.; Hamers, Josiane F., Ed. Theoretical and Methodological Issues in the Study of Languages/Dialects in Contact at Macro- and Micro-Logical Levels of Analysis; see FL 016 743.
PUB TYPE Information Analyses (070) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Bilingualism; Intergroup Relations; Language Processing; *Language Usage; Language Variation; *Multilingualism; *Psycholinguistics; *Research Methodology; Research Needs; *Social Networks; Social Structure; Sociocultural Patterns; *Sociolinguistics
IDENTIFIERS *Language Contact

ABSTRACT

The literature of psycholinguistics and multilingualism is reviewed to examine the relationship between macrological social variables such as social class, and individual variables related to language behavior in a multilingual setting. The growing body of evidence assessing the link between certain social and community dimensions and specific behavior is found to be largely correlational, with little effort made to explore the process by which societal and individual variables influence each other and affect the individual's behavior. Social network investigation might bridge the gap between sociolinguistic and psycholinguistic analysis of multilingual behavior by addressing the question, "How does one become cognizant of the social structure and its link with language behavior?" (Author/MSE)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
A. Bruyner
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

THE RELEVANCE OF SOCIAL NETWORK ANALYSIS IN THE PSYCHOLINGUISTIC INVESTIGATION OF MULTILINGUAL BEHAVIOR

Josiane F. Hamers
Université Laval

ED282448

Résumé / Abstract

Dans le présent article nous donnons d'abord une synthèse des fondements psychologiques qui permettent d'élaborer une approche socio-psychologique du comportement langagier en situation de contact des langues. Notre approche tente de faire le lien entre les variables individuelles et les variables socio-structurales en supposant notamment que l'individu a accès à la structure sociétale par le biais des réseaux sociaux; certaines caractéristiques de ceux-ci, notamment l'homogénéité linguistique, la qualité, la fréquence, la densité et la multiplexité sont des déterminants importants du comportement langagier multilingue. Actuellement nous vérifions certaines hypothèses concernant la relation entre les caractéristiques de réseaux et les types de développement bilingue.

The aim of the present paper is to argue that the social network around the individual is an important intervening variable in explaining the relationship found between macrological social variables such as social class and individual variables relevant to language behavior in a multilingual setting. Whereas there is an ever growing body of evidence assessing the link between certain social and community dimensions and specific behavior, most of this data is of a purely correlational nature (HAMERS & BLANC, 1983; HAMERS & BLANC, 1984) and very little effort has been made so far to explore the process by which societal and individual variables influence each other and the individual's behavior (TABOURET-KELLER, 1983).

1. A general psychological framework

Without denying the fact that individuals will in the long run shape the society in which they live and that individual variables can thus be viewed as causal to societal outcomes, our level of analysis insists rather on the causal relationship whereby societal variables will shape individual outcomes. Without taking an extreme behavioristic approach, we rather go along with BANDURA's views (1976) on social learning; that is, there is a reciprocal determinism between individual, environment and behavior which will all be interactive with each other: in certain cases behavior will be mainly influenced by environmental factors, whereas in others individual factors will

FL016747

BEST COPY AVAILABLE

determine behavior; behavior in turn will be of importance in shaping the self-regulating mechanism and the construction of the internal determinants relevant to the individual's future behavior. Social learning in humans — and this includes the acquisition of language behavior — is characterized by its self-regulating capacity; a human individual is capable of controlling his own behavior through his capacity for rearranging the received environmental stimulation thanks to the development of its own cognitive support. These self-regulating functions are created and maintained by external influences; once established they will however determine the individual's behavior. In this sense human nature is thus viewed as a vast potential which can be shaped into structure through various learning mechanisms and experiences (including S-R learning, S-S learning, perceptual and vicarious learning, etc.) and the human being will behave as an active information-processor.

In this general framework HAMERS & BLANC (1982), proposed a model of bilingual development whereby they argued that the type of bilinguality and the self-regulating mechanisms a child would develop is the outcome of the internalization of environmental language behavior including linguistic functional models, attributed relative status of both languages and perceived ethnolinguistic vitality. This internalization, which plays a major role in establishing the self-regulating processes crucial to language behavior is viewed as an active psychological process whereby the child reorganizes the social values associated with the language behavior prevalent in his community in terms of his own experience. The present discussion puts forward the argument that the child does not become directly cognizant of the societal values: when he considers some of them as part of his own endowment, he will do so through the mediation of the inter-personal relations in his own immediate social environment. In other words, certain characteristics of the child's social network and the language behavior associated with them will be of the uttermost importance in shaping the child's linguistic development, its social psychological and cognitive support and the subsequent language behavior.

Before discussing further the relevance of social networks as an important intervening variable for language behavior in a multilingual setting, a few more theoretical issues have to be raised, namely concerning the nature of language behavior and social representation. Language behavior which includes the linguistic behavior of the individual and its psychological correlates such as cognitive, affective and social-psychological ones, is essentially viewed as social behavior and has therefore to be considered part of the child's social cognitive endowment. By this, I mean that behavior is subsequent to an interaction between the individual and animate or social objects. As FORGAS (1981) points out, in the past decades psychology as a discipline has undergone a general shift of interest from observable behavior to internal processes as explanatory concepts, from behaviorism to cognitivism. Cognition is no longer viewed as limited to information processing, storage and retrieval but includes all

processes involved in knowing (HILGARD, 1980). In this sense it can be argued that all human cognition is profoundly social; knowledge is socially structured and transmitted, influenced by the values and norms of the social environment and ideas are created at the social as well as at the individual level (FORGAS, 1981). Social cognition, however, is not merely a product of intra-individual cognitive processes albeit influenced by social environment; it results from the interaction between cognitive process, affective processes, motivations, values, collective cognition, etc.; it involves processes which are uniquely social in character as well as processes which are individual. It is knowledge about how to act socially.

Ever since the development of the attribution theory (e.g. HEIDER, [1958]; JASPERS & HEWSTONE [1982]), social psychology has focused on the relevance of social perception and social cognition; social perception and cognition opposed to physical perception and cognition include social cognitive tasks such as causal judgment whereby the personal or situational causes of action or outcome are attributed and social inferences are made about the attributes of the relevant entities including traits, abilities and intent of the actors and the constraints of the situation (ROSS, 1981).

According to recent views in child language development (e.g. WELLS, 1981), language is acquired in the first place as a mean of interacting with those "significant others" who are the most involved in the child's life; for example, HALLIDAY (1975) points out that the acquisition of early meaning depends as much on the dynamics of interpersonal interaction as on the articulation of a complex linguistic structure. This approach also emphasizes the fact that the construction of social meaning is an interactive process that begins at birth (e.g. HALLIDAY, 1978, TREVARTHEN, 1978). During the first year of his life the child learns a lot about the reciprocity relations in social interactions and about social routines (BRUNER, 1975; NELSON, 1981); on this basis he will develop conversational models in partnership with his parents (SNOW, 1977), patterns of social play and dialogue with peers. NELSON (1981), for example, insists on the fact that the child acquires social knowledge in the form of a script. According to her, a script is an ordered sequence of actions appropriate to a particular spatial-temporal context, organized around a goal; the social script specifies roles and props and defines obligatory and optional actions. The essentials of social script learning which develops through observation and active participation are acquired at the same time as language develops. Language thus acquired as a code for elaborating social scripts is a part of the child's social endowment that will develop from his early interactions with others. The relative importance attributed to language by those individuals with whom he interacts will shape the building of the social psychological and cognitive mechanisms which the child will use in self-regulating his future language behavior as for example his social/cultural identity (for theorizing on social identity, see for example TAJFEL & TURNER, 1979). When two or more languages are in contact in the child's immediate social environment, the existing

relations between the two languages will also be part of the child's social endowment and play an important role in the construction of the child's psychological mechanisms (for more details, see HAMERS & BLANC, 1982; 1983), and the social representation the child will develop.

The concept of social representation, used by the sociologist DURKHEIM (1898) in the past century was re-introduced in present day social psychology by MOSCOVICI (1982). It refers to the knowledge the individual has about various aspects of social reality; this knowledge is shared by many members of a society but is apprehended at the individual level. As a construct it is similar to and includes the notions of social attitudes and stereotypes which are viewed as reflections of the social world in the individual (TAJFEL, 1981). Because of its collective character social representation cannot account for individual differences but only for group differences (MOSCOVICI, 1981). In the case of a multilingual setting, language attitudes will play an important role; they will not only reflect intergroup relations, but will also mediate and determine them (GILES & RYAN, 1982; GILES, HEWSTONE & BALL, 1983); furthermore, social representation will play a key role in constructing the cognitive mechanisms relevant to language behavior. Social representation is a relevant concept in the sense that it explains how sociological structures have psychological reality.

Taken together these three psychological mainstreams, namely the theories of social learning and social cognition, the social cognitive approach to language development and the social-psychological models of causal attribution and social representation, when considered in the context of multilingual settings, are powerful enough to explain the varieties and complexities of language development and behavior and to allow for any intergroup differences that can be observed. However, whereas these different levels of psychological analysis are complementary to each other and all insist on the relevance of the social structure in explaining individual behavior, they do not propose any explanation as to how the individual will become cognizant of social structures.

2. The relevance of macro-sociological variables in bilingual behavior

During the last decades an impressive body of empirical evidence shows a definite link between macro-sociological variables such as social class or minority status and the individual outcome of bilingual experience during childhood.

In short, the following picture emerges: whenever an individual is a member of a social/cultural minority group, bilingual experience in early childhood, mostly promoted through a home/school switch with formal education occurring in the socially dominant language, is likely to have negative consequences for the child's cognitive, affective and linguistic development. On the other hand, whenever

the child is a member of a socio-culturally dominant group, the bilingual experience which will occur because both languages are valorized in the child's environment, far from having negative consequences, can have beneficial effects on the child's development. This correlational evidence has prompted LAMBERT (1974) to put forward a first theoretical approach in which he makes the distinction between an additive and a subtractive form of bilingualism. In the former case the setting is such that the child will add a second language to its linguistic repertoire and use it as an additional tool for thought and communication, thus having an enrichment experience as compared to the monolingual child; in the latter case the second language, more prestigious in society, will tend to replace the mother-tongue thereby damaging the child's development. In a recent publication CUMMINS (1984), analyzing several approaches to bilingual education, points out that whereas bilingual education for the majority child such as found in immersion programs and international schools is primarily conceived and described as an enrichment program, bilingual education for minority children aims more often than not at assimilation and at the disappearance of the minority language, i.e. the child's mother-tongue.

3. The link between societal and individual factors

Whereas the recent studies on bilingual education have the merit of pointing out that sociopolitical rather than individual factors are in the first place responsible for the developmental outcomes of bilingual education (CUMMINS, 1984), it remains for us to explain how the socio-political context in which bilinguality develops can impinge on the individual.

If we summarize the present state of knowledge with regard to multilingual behavior in developmental and social psychology we can conclude that some sound theoretical constructs have been and are still being developed in the framework of a psychological approach. The theoretical approaches, as well as the empirical evidence which supports them, all point to the relevance of the interaction between socio-structural features and social-psychological processes. However, these explanations remain psychological to the extent that they acknowledge a correlation between individual behavior and social structure but do not seek an explanation in sociological theorizing. In this sense ST. CLAIR (1980; 1982) argues that empirical findings concerning the psychology of bilingualism and interethnic contacts should be placed in the larger context of the dynamics of socio-political and socio-historical factors.

One attempt to explain how the social representation in a multicultural setting comes into existence has been made by GILES, BOURHIS & TAILOR (1977) who developed the notion of perceived ethnolinguistic vitality. The authors argue that the group's perception of the level of its own ethnolinguistic vitality (as assessed by three major groups of socio-structural variables, namely status, demography and ins-

titutional support) will be a decisive factor for ethnolinguistic group identification and for the choice of language strategies in multilingual encounters. However, LABRIE (1983) failed to find a relation between perceived ethnolinguistic vitality and attitudes towards the second language in a linguistic minority community. One has to comment that when GILES and his colleagues tend to measure the perceived ethnolinguistic vitality (see BOURHIS, GILES & ROSENTHAL, 1981), they limit their approach to cognitive aspects of macrosociological factors.

Actually, sociological approaches to multilingual settings claim that a micro-sociological level of analysis is required in explaining language behavior. For example, BREITBORDE in a special issue of the International Journal of the Sociology of Language (1983), insists on the fact that the social system and its structure plays a crucial role in interpersonal interactions and in the use of languages in them, with special reference to code-switching; he points out that the relationship between the social structure and the individual action cannot be understood without reference to a mediating micro-sociological construct. In the same vein, GAL (1983) argues that too little attention has been paid to bridging the gap between abstract notions of social structure and details of the interaction.

In this sense social network analysis is a promising approach in understanding how individuals become cognizant of the information concerning the social structures. It might also be explanatory of the fact that in a subtractive setting some individuals end up being additive bilinguals (LANDRY, in PRUJINER & AL., 1984) or that in an additive environment some individuals do not benefit from their bilingual experience.

4. Social network and psychological analysis

The notion of social network analysis has been put forward by the anthropologist BARNES (1966) and used by sociolinguists such as BLOM and GUMPERZ (1972) because personal associations were clearly linked with bilingual code-switching. A social network is defined by individuals and the interactions between them; it has neither limits, nor marked internal boundaries; each individual can be viewed as the focal point of a constellation of friends, relatives, neighbours and so on. Most of the research on social network (e.g. BOISSEVAIN & MITCHELL, 1973; HOLLAND & LEINHARDT, 1973; ROGERS & KINCAID, 1981) addressed themselves to the existing relations between individuals in a small closed community, group or neighbourhood. From these studies it is apparent that certain characteristics of the network such as density, multiplexity, homogeneity, frequency, quality and length of contacts, are predictive of behavior. The correlation between interpersonal relations in the social environment and language variation has been assessed in a number of sociolinguistic studies (e.g. BLOM & GUMPERZ, 1972; LABOV, 1978, GAL, 1979). MILROY (1980), analyzing language variation

in three neighbourhoods of Belfast, found a positive relation between the use of the vernacular and the density and multiplexity of the social network. Social networks are important because they generate social status and thus confer on the individual a place in the social structure (BREITBORDE, 1983). While having the merit of refining the social analysis, considered as relevant for language behavior and for explaining how an individual fits in a social structure, these studies tend however to overlook the role played by individual variables in language behavior.

In an attempt to reconcile the sociological and the psychological approaches to multilingual behavior, a group of us (PRUJINER & AL., 1984) proposed an integrative multidisciplinary approach. This approach calling on the notion of social network as the key concept to explain how social structure is apprehended by the individual, was innovative in the sense that social networks were analyzed as focalized on the individual and perceived by him and that for the first time equally refined sociological and psychological analysis of multilingual behavior were brought together.

From a number of pilot studies (HAMERS, DESHAIES & LABRIE, 1984; DESHAIES, HAMERS & LABRIE, 1984) designed to test the developed methodology, it appears that in a multilingual setting some definite if complex patterns of relations between networks and relevant psychological processes emerge: for example, in the adolescent study, quality of network relations prevails over other characteristics of the family network, whereas in the peer group density and multiplexity of the network become more dominant. Certain psychological characteristics of bilinguals are also related to network organizing: confidence in mother-tongue use appears as a function of the quality of the relation with the father whereas confidence in the second language is a function of both the quality of parental links and of the characteristics of 2nd language peer network. Moreover structural characteristics of networks are relevant in those groups where frequency of contacts are relatively low, whereas affective characteristics (such a quality and importance of contact) are better predictors of language behavior when contacts are frequent as with parents and siblings.

In my present research I am attempting to analyse how different forms of bilinguality evolve in different multilingual network experiences and how a number of psychological processes relevant to bilingual functioning relate to the child's micro-social environment (for details, see HAMERS, 1985). ARNBERG (1984) points out that children will not reach a balanced bilinguality if one of the parents is the only speaker of one of the languages in the child's network but that peer-interaction in play groups will promote a native-like command of the child's weaker language. To what extent has a minority language to be used around and with a child to promote an additive form of bilingualism? The psychological processes of bilingual behavior might be better understood if we can link them to the sociological dynamics existing in a multilingual setting.

By viewing the individual processes in the light of a sociological construct which is no longer static but which attempts to explain how individuals end up in social structure and by calling on a sociolinguistic description which incorporates the status-oriented as well as the solidarity-oriented functions of language (MILROY, 1982), we might be in a better position to explain group differences as well as individual differences in multilingual behavior. By investigating the link between social networks and social representation we might be able to answer the question "How does one become cognizant of the social structure and its link with language behavior?" Social network investigation might be the way to bridge the gap between sociolinguistic and psycholinguistic analyses of multilingual behavior.

REFERENCES

ARNBERG, L. (1984), "Mother Tongue Playgroups for Pre-school Bilingual Children", *Journal of Multilingual and Multicultural Development*, 5(1), 65-84.

BANDURA, A. (1976), *Social Learning Theory*. Englewood Cliffs, N.J. 07632: Prentice Hall, Inc.

BARNES, J.A. (1966), *Models of Social Organization*. Londres: Royal Anthropological Institute of Great Britain & Ireland — Occasional Papers.

BLOM, J.P. & J.J. GUMPERZ (1972), "Social Meaning in Linguistic Structures: Code Switching in Norway", In Gumperz & Hymes (eds.), *Directions in Sociolinguistics*. New York: Rinehart & Winston, 407-434.

BOISSEVAIN, J. & C. MITCHELL (eds.) (1973), *Network Analysis: Studies in Human Communication*. The Hague: Mouton.

BOURHIS, R.Y., GILES, H. & ROSENTHAL, D. (1981), "Notes on the Construction of a Subjective Vitality Questionnaire for Ethnolinguistic Groups", *Journal of Multilingual and Multicultural Development*, 2, 2, 145-155.

BREITBORDE, L.B. (1983), "Levels of Analysis in Sociolinguistic Explanation: Bilingual Code Switching, Social Relations and Domain Theory", *International Journal of the Sociology of Language*, 39, 5-43.

BRUNER, J. (1975), "From Communication to Language — A Psychological Perspective", *Cognition*, 3, 255-287.

CUMMINS, J. (1984), *Bilingualism and Special Education: Issues in Assessment and Pedagogy*. Clevedon: Multilingual Matters.

DAY, R.R. (1982), "Children's Attitude Toward Language", In E.B. Ryan and H. Giles (eds.), *Attitudes Towards Language Variation: Social and Applied Contexts*. London: Edward Arnold.

DESHAIES, D., HAMERS, J.F., & LABRIE, N. (1984), *La relation entre les réseaux sociaux et le comportement langagier d'adultes en milieu de contact des langues: une étude pilote*. Paper presented at the International Association of Applied Linguistics, Brussels 5-10, August 1984. CIRB : Laval University, Unpublished mimeo.

DURKHEIM, E. (1898), "Représentations individuelles et représentations collectives", *Revue de métaphysique et de morale*, VI, 273-300.

FORGAS, J.P. (1981), "What is Social About Social Cognition?", In J.P. Forgas (ed.). *Social Cognition*. London: Academic Press.

GAL, S. (1979), *Language Shift: Social Determinants of Linguistic Change in Bilingual Austria*. New York: Academic Press.

—— (1983), "Comments on Breitborde, L. Levels of Analysis in Sociolinguistic Explanation: Bilingual Code-Switching, Social Relation and Domain Theory", *International Journal of the Sociology of Language*, 39, 63-72.

GILES, H., BOURHIS, R.Y. & TAYLOR, D.M. (1977), "Towards a Theory of Language in Ethnic Relations", In H. Giles (ed.), *Language, Ethnicity and Intergroup Relations*. New York: Academic Press.

GILES, H., HEWSTONE, M. & BALL, P. (1983), "Language Attitudes in Multilingual Settings: Prologue with Priorities", *Journal of Multilingual and Multicultural Development*, 4, (2 & 3), 81-100.

GILES, H. & RYAN, E.B. (1982), "Prolegomena for Developing a Social Psychological Theory of Language Attitudes", In E.B. Ryan and H. Giles (eds.), *Attitudes Towards Language Variation: Social and Applied Contexts*. London: Edward Arnold.

HALLIDAY, M.A.K. (1975), *Learning How to Mean*. London: Arnold.

—— (1978), "Meaning and the Construction of Reality in Early Childhood", In H.L. Pick, Jr. and E. Saltzman (eds.), *Modes of Perceiving and Processing Information*. Hillsdale, N.J.: Lawrence Erlbaum Associates.

HAMERS, J.F. (in press), "Le rôle des réseaux sociaux dans le développement de la bilingualité", Rapport d'activité de l'Institut de Phonétique, Université Libre de Bruxelles, 20.

HAMERS, J.F. & BLANC, M. (1982), "Towards a Social-Psychological Model of Bilingual Development", *The Journal of Language and Social Psychology*, 1, 29-49.

—— (1983), *Bilingualité et bilinguisme*. P. Mardaga, Bruxelles: Série Sciences sociales, 129.

—— (1984), "Réseaux sociaux, mécanismes socio-psychologiques et développement de la bilingualité", In J.F. Hamers, J.D. Gendron and R. Vigneault (eds.), *Du disciplinaire vers l'interdisciplinaire dans l'étude du contact des langues*. Actes du colloque CIRB-ICSBT, 22-25 mai 1983, CIRB: Québec, B-135, 125-136.

HAMERS, J.F., DESHAIES, D. & LABRIE, N. (1984), *Aspects socio-psychologiques du comportement langagier en fonction des réseaux chez des adolescents en milieu de contact des langues.* Paper presented at the International Association of Applied Linguistics, Brussels, 5-10 August 1984, CIRB: Laval University, unpublished mimeo.

HEIDER, F. (1958), *The Psychology of Interpersonal Relations.* New York: Wiley.

HEWSTONE, M. & JASPARS, J. (1982), "Intergroup Relations and Attribution Processes", In H. Tajfel (ed.), *Social Identity and Intergroup Relations.* Cambridge: Cambridge University Press.

HILGARD, E.F. (1980), "Consciousness in Contemporary Psychology", *Annual Review of Psychology*, 31, 1-26.

HOLLAND, P.W. & LEINHARDT, S. (eds.) (1979), *Perspectives on Social Network Research.* New York: Academic Press.

JASPARS, J. & HEWSTONE, M. (1982), "Cross-cultural Interaction, Social Attribution and Intergroup Relations", In S. Bochner (ed.), *Cultures in Contact: Studies in Cross-cultural Interaction.* Oxford: Pergamon.

LABOV, W. (1978), *Le parler ordinaire*, 1, 11. Paris: Editions de Minuit.

LABRIE, N. (1983), *La vitalité ethnolinguistique et les caractéristiques socio-psychologiques de l'individu vivant en milieu bilingue.* Thèse de maîtrise non publiée, Québec: Université Laval.

LAMBERT, W.E. (1974), "Culture and Language as Factors in Learning and Education", In F.E. Aboud and R.D. Mead (eds.), *Cultural Factors in Learning.* Bellingham: Western Washington State College.

MILROY, L. (1980), *Language and Social Networks.* Oxford: Blackwell.

—— (1982), "Language and Group Identity", *Journal of Multilingual and Multicultural Development*, 3 (3), 207-216.

MOSCOVICI, S. (1981), "On Social Representation", In J.P. Forgas (ed.), *Social Cognition: Perspectives on Everyday Understanding.* London: Academic Press.

NELSON, K. (1981), "Social Cognition in a Script Framework", In J.H. Flavell and L. Ross (eds.), *Social Cognitive Development: Frontiers and Possible Futures.* Cambridge: Cambridge University Press, 97-118.

PRUJINER, A., DESHAIES, D., HAMERS, J.F., BLANC, M., CLEMENT, R. & LANDRY, R. (1984), *Variations du comportement langagier lorsque deux langues sont en contact*. Québec: Centre international de recherche sur le bilinguisme, G-5.

ROGERS, E.M. & KINCAID, L.D. (1981). *Communication Networks. Towards a New Paradigm for Research*. New York: Free Press.

ROSS, L. (1981), "The 'Intuitive Scientist' Formulation and its Developmental Implications", In J.H. Flavell and L. Ross (eds.). *Social Cognitive Development*. Cambridge: Cambridge University Press, 1-42.

ST-CLAIR, R.N. (1980), "The Contexts of Language", In R.N. St-Clair and H. Giles (eds.), *The Social and Psychological Contexts of Language*. Hillsdale, N.J.: Lawrence Erlbaum.

—— (1982), "From Social History to Language Attitudes", In E.B. Ryan and H. Giles (eds.), *Attitudes Towards Language Variation: Social and Applied Contexts*. London: Edward Arnold.

SNOW, C.E. (1977), "Mother's Speech Research: From Input to Interaction", In C.E. Snow and C. Ferguson (eds.), *Talking to Children*. Cambridge: Cambridge University Press.

TABOURET-KELLER, A. (1983), "Comments on Breitborde, L., Levels of Analysis in Sociolinguistic Explanation: Bilingual Code-Switching, Social Relations and Domain Theory", *International Journal of the Sociology of Language*, 39, 139-148.

TAJFEL, H. (1981), "Social Stereotypes and Social Groups", In J.C. Turner and H. Giles (eds.), *Intergroup Behaviour*. Oxford: Blackwell.

TAJFEL, H. & TURNER, J.C. (1979), "An Integrative Theory of Intergroup Conflict", In W.C. Austin and S. Worcher (eds.), *The Social Psychology of Intergroup Relations*. Monterey: Brooks-Cole.

TREVARTHEN, C. (1978), "Modes of Perceiving and Modes of Acting", In H.L. Pick, Jr. & Saltzman, E. *Modes of Perceiving and Processing Information*. Hillsdale, N.J.: Lawrence Erlbaum Associates.

WELLS, G. (1981), *Learning Through Interaction: The Study of Language Development*. Cambridge: Cambridge University Press.